



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,979	08/26/2003	Bruce Fletcher Johnson	133976	2828
<div>6147      7590      09/14/2007 GENERAL ELECTRIC COMPANY GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59 NISKAYUNA, NY 12309</div>				
			EXAMINER SCHLIENTZ, LEAH H.	
			ART UNIT 1618	PAPER NUMBER
			MAIL DATE 09/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/647,979

**Applicant(s)**

JOHNSON ET AL.

**Examiner**

Leah Schlientz

**Art Unit**

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-23, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18, 20 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/29/2007 has been entered.

### ***Status of Claims***

Claim 16 has been cancelled. Claims 18 and 24 have been amended. Claims 18 and 20 – 26 are pending, of which claims 21 – 23, 25 and 26 have been withdrawn from consideration as being drawn to non-elected species. Claims 18, 20 and 24 are readable upon the elected species and are examined herein on the merits for patentability.

### ***Response to Arguments***

Applicant's arguments filed 8/29/2007 have been fully considered but they are not persuasive for reasons set forth hereinbelow.

***Claim Rejections - 35 USC § 112***

Claims 18, 20 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims are drawn to a method of producing an imaging agent comprising the steps of providing a compound consisting of a targeting moiety directly bound to a leaving group, contacting the compound with a solution containing a detectable species to form the imaging agent, wherein solubility of the imaging agent differentiates it from the compound; separating the imaging agent from the compound by differential solubility, and recovering the imaging agent. The specification was examined, and support was found only for separation of a leaving group from the imaging agent based on differences in chemical attributes (e.g. net charge or polarity) of the molecules of physical attributes of the molecules through the use of a solid support (abstract). However, the disclosure of separation based on differences in net charge (i.e. separation by ion exchange column) or polarity (i.e. separation by silica gel column, etc.) does not provide sufficient support that applicant had possession of the concept of an imaging agent and compound having differential solubility and a separation step based on said differential solubility, as claimed. See also paragraph 0018 or 0030 of originally filed specification. This is a new matter rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 18, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers *et al.* (US 5,705,713) in view of Johnson *et al.* (US 5,264,570), for reasons set forth in the Office Action mailed 4/30/2007.

Applicant argues on page 9 of the Response that Chambers teaches a process for preparation of fluoro compounds wherein a compound of formula  $R^1R^2CHOX$  is converted to its fluorinated analog (col. 1, lines 65 – col. 2, line 5). The product may be “separated, e.g. by filtration, and purified in the usual way” (col. 4, lines 55 – 65), etc. Claim 18 has been amended to specify that the imaging agent has “solubility of the imaging agent differentiates it from the compound” and that the imaging agent is separated from the compound via that differential solubility. Applicant contends that neither Chambers nor Johnson mentions using differential solubility to separate the starting material from the fluorinated product.

This is non-persuasive because, as noted by Applicant, Chambers teaches separation, “e.g. by filtration” and purification (col. 4, lines 55 – 65). One of ordinary skill in the art would recognize that separation of starting material / product via filtration is a

Art Unit: 1618

method by which solids and fluids are separated (i.e. a method of separation due to "differential solubility").

### **Conclusion**

No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leah Schlientz whose telephone number is 571-272-9928. The examiner can normally be reached on Monday - Friday 8 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHS

  
MICHAEL G. HARTLEY  
SUPERVISORY PATENT EXAMINER